

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A display device comprising:

- a substrate having a display portion;
- a gamma correction circuit provided over said substrate;
- an image signal processing circuit provided over said substrate and connected with an output line of said gamma correction circuit; and
- a plurality of photosensors provided over said substrate for changing an output voltage of the gamma correction circuit in accordance with a brightness of a surrounding.

2. (Original) A display device according to claim 1, wherein said display device is a liquid crystal display device or an electroluminescence display device.

3. (Original) A display device according to claim 1, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

4. (Original) A display device according to claim 1, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

5 - 8. (Canceled)

9. (Previously Presented) A display device comprising:

a substrate having a display portion;

a plurality of photosensors provided over the display portion for detecting a brightness of a surrounding; and

a gamma correction circuit provided over said substrate for outputting a voltage for determining a period that a pixel is in a light state in accordance with electrical signals from said plurality of photosensors.

10. (Original) A display device according to claim 9, wherein said display device is a liquid crystal display device or an electroluminescence display device.

11. (Original) A display device according to claim 9, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

12. (Original) A display device according to claim 9, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

13. (Previously Presented) A display device comprising:

a plurality of photosensors provided over a peripheral portion of a substrate;

a source follower circuit connected with said plurality of photosensors;

a gamma correction circuit connected with said source follower circuit;
an image signal processing circuit connected with said gamma correction circuit;
a source signal line driver circuit connected with said image signal processing circuit; and
a pixel portion which is connected with said source signal line driver circuit and formed over said substrate.

14. (Original) A display device according to claim 13, wherein said pixel portion has at least a pixel electrode, a liquid crystal layer, and a counter electrode.

15. (Original) A display device according to claim 13, wherein said pixel portion has at least a pixel electrode and a light emitting layer.

16. (Original) A display device according to claim 13, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

17. (Original) A display device according to claim 13, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

18. (Previously Presented) A display device comprising:

a first substrate;

a second substrate;

a plurality of photosensors which are formed over said second substrate and fixed to an outer portion of said first substrate;

a source follower circuit connected with said plurality of photosensors;

a gamma correction circuit connected with said source follower circuit;

an image signal processing circuit connected with said gamma correction circuit;

a source signal line driver circuit connected with said image signal processing circuit; and

a pixel portion which is connected with said source signal line driver circuit and formed over said first substrate.

19. (Original) A display device according to claim 18, wherein said pixel portion has at least a pixel electrode, a liquid crystal layer, and a counter electrode.

20. (Original) A display device according to claim 18, wherein said pixel portion has at least a pixel electrode and a light emitting layer.

21. (Original) A display device according to claim 18, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

22. (Original) A display device according to claim 18, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

23. (Previously Presented) A display device comprising:

- a substrate having a display portion;
- a gamma correction circuit formed adjacent said substrate;
- an image signal processing circuit formed adjacent said substrate and connected with an output line of said gamma correction circuit; and
- a plurality of photosensors formed adjacent said substrate for changing an output voltage of the gamma correction circuit in accordance with a brightness of a surrounding,

wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

24. (Original) A display device according to claim 23, wherein said display device is a liquid crystal display device or an electroluminescence display device.

25. (Original) A display device according to claim 23, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

26. (Withdrawn) A method of manufacturing a display device comprising the steps of:

- forming a pixel portion using a thin film transistor on a first substrate;
- forming a photosensor on a second substrate; and
- fixing the second substrate to said first substrate after forming the pixel portion and the photosensor.

27. (Withdrawn) A method of manufacturing a display device according to claim 26, wherein in the pixel portion, at least a pixel electrode, a liquid crystal layer, and a counter electrode are formed.

28. (Withdrawn) A method of manufacturing a display device according to claim 26, wherein in the pixel portion, at least a pixel electrode and a light emitting layer are formed.

29. (Withdrawn) A method of manufacturing a display device according to claim 26, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

30. (Withdrawn) A method of manufacturing a display device according to claim 26, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.

31. (Withdrawn) A method of manufacturing a display device comprising the steps of:
forming a pixel portion, a driver circuit for driving said pixel portion, and a control circuit for controlling a brightness of said pixel portion, using a thin film transistor, on a first substrate;

forming a photosensor on a second substrate; and

fixing said second substrate to said first substrate to electrically connect said control circuit with said photosensor after forming the pixel portion, the driver circuit, the control circuit and the photosensor.

32. (Withdrawn) A method of manufacturing a display device according to claim 31, wherein in the pixel portion, at least a pixel electrode, a liquid crystal layer, and a counter electrode are formed.

33. (Withdrawn) A method of manufacturing a display device according to claim 31, wherein in the pixel portion, at least a pixel electrode and a light emitting layer are formed.

34. (Withdrawn) A method of manufacturing a display device according to claim 31, wherein each of said photosensors has a photoelectric conversion layer comprising amorphous silicon.

35. (Withdrawn) A method of manufacturing a display device according to claim 31, wherein said display device is incorporated into an electronic equipment selected from the group consisting of a video camera, a digital camera, a projector, a head-mounted display, a car navigation system, a car stereo, a personal computer, and a portable information terminal.